

AMENDMENTS TO THE CLAIMS

Claims 1-15 (Cancelled)

Claim 16 (Currently Amended) A process for the preparation of chemically and optically highly pure (*R*)- and (*S*)- α -hydroxycarboxylic acids, which comprises treating the hydrolysis solution obtained by acidic hydrolysis of the (*R*)- and (*S*)-cyanohydrins, prepared by enzyme-catalyzed addition of a cyanide group donor to the corresponding aldehydes or ketones, directly with an aromatic hydrocarbon, optionally in combination with a cosolvent selected from the group consisting of ~~aldehydes~~ ethers and ketones, then extracting the mixture at hydrolysis temperature, whereupon after cooling of the organic phase the corresponding chemically and optically highly pure (*R*)- and (*S*)- α -hydroxycarboxylic acids having an optical purity of over 98%ee crystallize out.

Claim 17 (Previously Presented) The process as claimed in claim 16, wherein chemically and optically highly pure aromatic (*R*)- and (*S*)- α -hydroxycarboxylic acids of the formula $\text{Ar}-(\text{CH}_2)_n\text{CH}(\text{OH})\text{CO}_2\text{H}$ in which n is 0 or an integer from 1 to 5 and Ar is an aryl or heteroaryl radical which is unsubstituted or substituted by OH, C_1 - C_4 -alkyl or alkoxy, thioalkyl, halogen, optionally substituted phenyl or phenoxy, amino or nitro, are prepared.

Claim 18 (Currently Amended) The process as claimed in claim ~~11 or~~ 16, wherein toluene, xylene, benzene, ethylbenzene, isopropylbenzene or chlorobenzenes are employed as aromatic hydrocarbons.

Claim 19 (Currently Amended) The process as claimed in claim ~~11 or~~ 16, wherein the cosolvent employed is a solvent which increases the solubility of the hydroxycarboxylic acid in the organic phase and which is separable by distillation, in an amount from 5 to 50% by volume.

Claim 20 (Cancelled)

Claim 21 (Currently Amended) The process as claimed in claim 20 16 wherein the ether is tetrahydrofuran, methyl tert-butyl ether or dimethoxyethane.

Claim 22 (Currently Amended) The process according to claim 20 16 wherein the ketone is methylisobutyl ketone.

Claim 23 (Cancelled)